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CABBAGE CULTIVAR EVALUATION TRIALS

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## CABBAGE CULTIVAR EVALUATION TRIALS--1981

The cabbage cultivar evaluation trials were conducted at the OARDC Vegetable Crops Research Branch near Fremont. The soil is a sandy loam. The plots received 600 lb/A broadcast of 10-20-20 and 150 lb/A within row at planting of 6-24-12 fertilizer, 1 lb/A boron and 4 lb/A of Diazinon preplant incorporated. Treflan at 0.75 lb/A was pre-plant incorporated for weed control.

The plots were field seeded on July 1 using a Planet-Jr. seeder. Rows were 30 ft. long on 30-in. centers. The rows were hand-thinned to give a 12-in. spacing for the fresh market and an 18-in. spacing for the processing trial. Each cultivar was replicated three times in the replicated trial.

Cultural care throughout the season was according to recommended procedures. No serious insect, disease or weed problems developed during the season. Monthly rainfall totals were:

July	1.80 in.
August	2.68 in.
September	8.38 in.
October	2.63 in.

When the majority of the heads of a cultivar reached marketable maturity in the fresh market trial, the authors evaluated each cultivar for external color, uniformity of head size and maturity, plant size, plant uprightness, and wrapper-leaf cover. The numbers of bursted and rotted heads were recorded. The mature heads were then harvested, counted and weighed. Four heads of each cultivar were cut and the core length and polar and equatorial diameters recorded. One additional harvest was made for each cultivar when the majority of the remaining heads had reached marketable maturity. The observation trial was harvested once only with no re-cutting. The processing trial was harvested on October 20, with numbers and weight of heads recorded. Four heads of each cultivar from each replicate were cut, rated for internal tipburn and core length, equatorial and polar diameter recorded.

Seed companies who supplied seed for these trials included: Joseph Harris Co., Inc., Rochester, New York; Ferry-Morse Seed Co., Mountain View, California; Dessert Seed Co., Brooks, Oregon; Moran Seed, Inc., San Juan Bautista, California.

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TABLE 1. Yield and quality characteristics of cabbage cultivars from fresh market non-replicated trial-1981.

Cultivars	Source	Days*	First Harvest			Total Harvest		Measurements (in.)			
			Tons/ acre	Lbs/ head	% harvest	Tons/ acre	Lbs/ head	Core length	Polar diam.	Equa- torial diam.	Firm- ness**
Prime Time	Ferry-Morse	90	11.6	3.47	42.8	16.7	2.72	4.00	6.12	6.87	1.75
Blue Pak	Ferry-Morse	90	18.4	2.75	82.7	20.7	2.65	2.37	5.50	5.75	1.00
11C-X134	Ferry-Morse	90	22.2	3.31	82.7	25.4	3.15	3.37	5.75	7.00	1.75
FM-159	Ferry-Morse	104	11.6	5.17	44.4	11.6	5.17	3.87	6.62	7.12	2.50
FM-169	Ferry-Morse	104	14.1	4.03	64.3	20.2	4.03	2.50	6.25	6.37	2.25
EC 200	Ferry-Morse	90	15.0	2.98	54.8	19.1	2.62	3.62	6.00	6.50	2.00
Dessert 126	Dessert Seed	78	21.3	3.31	76.7	21.3	3.31	3.87	7.25	7.00	2.50
Greenback YR	Dessert Seed	104	11.9	3.55	42.8	11.9	3.55	3.62	6.50	5.75	1.00
Charleston Wakefield	Dessert Seed	90	10.9	2.17	60.0	12.9	1.78	3.50	7.12	6.00	2.50
Golden Acre YR	Dessert Seed	78	9.5	2.83	48.0	16.9	2.75	3.37	7.25	6.87	3.00
Early Jersey Wakefield	Dessert Seed	104	15.9	2.85	62.5	15.9	2.85	3.25	7.75	5.25	2.25
Market Prize	Harris Seed	90	15.7	3.32	58.6	18.1	3.08	4.00	6.25	7.12	1.25
RV-411	Harris Seed	104	16.6	3.13	63.3	16.6	3.13	2.65	6.00	6.00	1.50
BRR-1621	Harris Seed	104	9.8	3.19	45.8	9.8	3.19	2.75	5.75	6.37	1.25
BRR-1664***	Harris Seed										
Gladiator***	Harris Seed										

\* Days indicates the number of days from seeding to first harvest.

\*\* Firmness rating of first harvest heads: 1 = firm, 2 = medium, 3 = soft.

\*\*\* Very low seedling emergence and insufficient stand for reliable evaluation.

TABLE 2. Quality characteristics of cabbage cultivars from fresh market non-replicated trial-1981\*

Cultivar	External color	Uniformity	Plant size	Uprightness	Leaf cover
Prime Time	2.0	1.0	2.0	2.0	2.0
Blue Pak	2.0	1.0	2.0	3.0	1.0
11CX134	1.0	1.0	3.0	2.0	2.0
FM-159	2.0	3.0	3.0	2.0	1.0
FM-169	1.0	1.0	3.0	2.0	1.0
EC-200	2.0	2.0	2.0	1.0	1.0
Dessert-126	1.0	4.0	2.0	2.0	2.0
Greenback YR	1.0	3.0	2.0	3.0	2.0
Charleston Wakefield	1.0	3.0	1.0	3.0	2.0
Golden Acre YR	1.0	3.0	2.0	2.0	2.0
Early Jersey Wakefield	1.0	2.0	3.0	3.0	2.0
Market Prize	1.0	3.0	3.0	3.0	2.0
RV-411	2.0	1.0	3.0	2.0	1.0
BRR-1621	1.0	3.0	2.0	2.0	3.0
BRR-1664**					
Gladiator**					

\* Color: 1 = green, 2 = blue-green, 3 = blue, 4 = red

Uniformity: 1 = good, 2 = fair, 3 = poor

Plant Size: 1 = small, 2 = medium, 3 = large

Uprightness: 1 = upright, 2 = slightly tipped, 3 = very tipped

Leaf Cover: 1 = good, 2 = fair, 3 = poor

\*\* Insufficient stand for reliable evaluation.

TABLE 3. Yield and quality characteristics of cabbage for processing, replicated trials-1981.

Cultivars	Source	Harvest Data			Head Measurements (in)		
		Tons/ A	Head wt. (lbs)	Tip* burn	Core length	Polar diameter	Equatorial diameter
Titan 90	Ferry-Morse	26.2	4.84	.00	3.41	7.12	7.83
Round-up	Ferry-Morse	22.4	4.44	.00	3.54	6.79	7.08
King Cole	Ferry-Morse	31.3	5.31	.00	3.83	7.29	7.62
Cole Cash	Moran	29.2	5.11	.17	3.79	6.75	7.71
NCX-9035	Moran	29.8	6.04	.17	3.41	7.08	8.00

\* 1 = none, 2 = fleck, 3 = line, 4 = massive

TABLE 4. Quality characteristic ratings of cabbage cultivars from processing replicated trials-1981\*

Cultivars	External color	Plant uniformity	Plant size	Uprightness	Leaf cover
Titan-90	2.0	1.6	3.0	2.0	1.0
Round-up	2.0	1.0	3.0	2.0	1.0
King Cole	1.0	1.0	3.0	2.6	1.0
Cole Cash	1.6	1.3	3.0	3.0	1.0
NCX-9035	2.0	1.0	3.0	2.3	1.0

\* Color: 1 = green, 2 = blue-green, 3 = blue, 4 = red  
 Uniformity: 1 = good, 2 = fair, 3 = poor  
 Plant Size: 1 = small, 2 = medium, 3 = large  
 Uprightness: 1 = upright, 2 = slightly tipped, 3 = very tipped  
 Leaf Cover: 1 = good, 2 = fair, 3 = poor



